AMENDMENTS TO THE CLAIMS

1. (Currently amended) A genetically engineered cDNA of the rat *bcl-x* gene, which comprises ~~a~~ the nucleotide sequence of SEQ ID NO: 1 except having at least one nucleotide substitution which changes, in the amino acid sequence encoded by SEQ ID NO: 1, ~~Tyr~~ tyrosine (Tyr) at amino acid residue 22 to ~~Phe~~ phenylalanine (Phe), ~~Gln~~ glutamine (Gln) at amino acid residue 26 to ~~Asn~~ asparagine (Asn), and ~~Arg~~ arginine (Arg) at amino acid residue 165 to ~~Lys~~ lysine (Lys).

2. (Original) The genetically engineered cDNA of claim 1, which is attached at its 5'-end with an oligonucleotide encoding a protein-transduction-domain peptide.

3. (Original) The genetically engineered cDNA of claim 2, wherein the oligonucleotide encodes the amino acid sequence of SEQ ID NO: 12 or 13.

4. (Previously presented) A recombinant vector comprising the genetically engineered cDNA of claim 1.

5. (Previously presented) An isolated cell comprising the recombinant vector of claim 4.

6. (Withdrawn) An improved protein produced by the genetically engineered cDNA of claim 1, which has at least one amino acid substitution in SEQ ID NO: 2, which amino acid substitution is selected from the substitutions of residues 22 Tyr to Phe, residues 26 Gln to Asn and residues 165 Arg to Lys.

7. (Withdrawn) The improved protein of claim 6, which is attached at the N-terminal with a protein-transduction-domain peptide.

8. (Withdrawn) The improved protein of claim 7, wherein the protein-transduction-domain peptide is an oligopeptide having the amino acid sequence of SEQ ID NO: 12 or 13.

9. (Previously presented) A recombinant vector comprising the genetically engineered cDNA of claim 2.

10. (Previously presented) A recombinant vector comprising the genetically engineered cDNA of claim 3.

11. (Previously presented) An isolated cell comprising the recombinant vector of claim 9.

12. (Previously presented An isolated cell comprising the recombinant vector of claim 10.

13. (Currently amended) An isolated polynucleotide comprising the nucleotide sequence of SEQ ID NO: 1 except having at least one nucleotide substitution which changes, in the amino acid sequence encoded by SEQ ID NO: 1, ~~Tyr~~ tyrosine (Tyr) at amino acid residue 22 to ~~Phe~~ phenylalanine (Phe), ~~Gln~~ glutamine (Gln) at amino acid residue 26 to ~~Asn~~ asparagine (Asn), ~~Arg~~ arginine (Arg) at amino acid residue 165 to ~~Lys~~ lysine (Lys), or a combination thereof.

14. (Previously presented) The polynucleotide of claim 13, which is attached at its 5'-end with an oligonucleotide encoding a protein-transduction-domain peptide.

15. (Previously presented) The polynucleotide of claim 14, wherein the oligonucleotide encodes the amino acid sequence of SEQ ID NO: 12 or 13.

16. (Previously presented) A recombinant vector comprising the polynucleotide of claim 13.

17. (Previously presented) An isolated cell comprising the recombinant vector of claim 16.

18. (Withdrawn) An isolated polypeptide comprising the amino acid sequence of SEQ ID NO: 2, said SEQ ID NO: 2 having at least one amino acid substitution selected from the group consisting of substitution of Tyr at amino acid residue 22 to Phe, substitution of Gln at amino acid residue 26 to Asn and substitution of Arg at amino acid residue 165 to Lys.

19. (Withdrawn) The polypeptide of claim 18, which is attached at the N-terminal with a protein-transduction-domain peptide.

20. (Withdrawn) The polypeptide of claim 19, wherein the protein-transduction-domain peptide is an oligopeptide comprising the amino acid sequence of SEQ ID NO: 12 or 13.

21. (Previously presented) A recombinant vector comprising the polynucleotide of claim 14.

22. (Previously presented) A recombinant vector comprising the polynucleotide of claim 15.

23. (Previously presented) An isolated cell comprising the recombinant vector of claim 21.

24. (Previously presented) An isolated cell comprising the recombinant vector of claim 22.

25. (Withdrawn) The polypeptide of claim 18, wherein said SEQ ID NO: 2 has an amino acid substitution selected from the group consisting of substitution of Tyr at amino acid residue 22 to Phe, substitution of Gln at amino acid residue 26 to Asn, substitution of Arg at amino acid residue 165 to Lys and a combination thereof.

26. (New) The genetically engineered cDNA of claim 1, which expresses a polypeptide comprising the amino acid sequence of SEQ ID NO: 2, and having at least one amino acid substitution selected from the group consisting of substitution of Tyr at amino acid residue 22 to Phe, substitution of Gln at amino acid residue 26 to Asn and substitution of Arg at amino acid residue 165 to Lys.

27. (New) The isolated polynucleotide of claim 13, which encodes a polypeptide comprising the amino acid sequence of SEQ ID NO: 2, and having at least one amino acid substitution selected from the group consisting of substitution of Tyr at amino acid residue 22 to Phe, substitution of Gln at amino acid residue 26 to Asn and substitution of Arg at amino acid residue 165 to Lys.